

AMENDMENT TO THE CLAIMS:

Please cancel claim 24, without prejudice or disclaimer of its subject matter; and amend claims 22, 23, 28, 32, 41, and 42, as indicated below. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1.-21. (Canceled)

22. (Currently Amended) A method of planning cellular communication networks, implemented using a computer, comprising the ~~[[step]]~~ steps of:

defining ~~at least one~~ a joint cost function to be optimized, ~~said at least one~~ the joint cost function being indicative of ~~[[the]]~~ a quality of service of location-based services ~~and~~ at least one additional class of services rendered by the network, ~~the at least one additional class of services being selected from a group of voice services and data services; and comprising the step of~~
~~selecting, by the computer, said at least one class of services as location-based services rendered by said network~~
optimizing, by the computer, the joint cost function.

23. (Currently Amended) The method of claim 22, wherein said joint cost function ~~indicative of the quality of service of location-based services~~ is based on measuring a dilution of precision of said network.

24. (Cancelled)

25. (Previously Presented) The method of claim 22, comprising the steps of:
providing a system for measuring at least one actual network parameter; and
comparing the measurements provided by said measurement system with the
corresponding parameters as planned.

26. (Previously Presented) The method of claim 22, comprising the step of locating
at least one critical point in the network where inadequate quality of service is being provided.

27. (Previously Presented) The method of claim 26, comprising the step of
generating information items indicative of counter measures to be carried out in said network in
order to dispense with at least one critical point.

28. (Currently Amended) The method of claim 22, wherein said ~~at least one~~ joint
cost function is optimized by using as input data the location of at least one radiating system
associated with one base station in said cellular communication network.

29. (Previously Presented) The method of claim 28, for planning a cellular
communication network over a given area, comprising the steps of:
subdividing said area into sub-areas, one of said sub-areas corresponding to the
destination sub-area of a new base station in said network, the remaining sub-areas being
expected to be affected by the introduction of said new base station;
planning said destination sub-area of the new base station also by evaluating the
effects on said remaining sub-areas; and

evaluating the quality of service resulting from said planning while ascertaining whether such a level of quality of service is satisfactory.

30. (Previously Presented) The method of claim 29, wherein said planning involves computing a point-by-point value of the dilution of precision for all the pixels in the area subject to planning.

31. (Previously Presented) The method of claim 30, wherein said planning involves computing a cost function pertaining to location services only, said cost function being a linear combination of said dilution of precision and the average and minimum values thereof.

32. (Currently Amended) The method of claim 29, comprising the step of optimizing a ~~joint~~ cost function for voice, data and location services.

33. (Previously Presented) The method of claim 29, wherein, if said quality of service is found not to be satisfactory, comprising the step of re-planning the position of at least one radiating system associated with one base station in said cellular network.

34. (Previously Presented) The method of claim 33, wherein said at least one radiating system whose position is re-planned associated with one base station is a radiating system associated with said new base station.

35. (Previously Presented) The method of claim 25, comprising the steps of:
providing a set of network design parameters;

obtaining from said measurement system a set of measurements corresponding to said set of design parameters; and

locating at least one critical area wherein the quality of service of said location services fails to reach an expected quality of service level as a result of said set of measurements failing to comply with said set of network design parameters.

36. (Previously Presented) The method of claim 35, comprising the steps of:
selecting a service scenario; and
selecting at least one location system as the one most affected by the variations in the network parameters being analyzed.

37. (Previously Presented) The method of claim 35, comprising the step of providing a list of points in the network characterized by their quality of service.

38. (Previously Presented) The method of claim 35, comprising the steps of generating and displaying a map of critical points in the area under analysis.

39. (Previously Presented) The method of claim 22, comprising the step of providing a remote deployment module arranged for operating on a sub-set of the network subject to planning.

40. (Previously Presented) The method of claim 39, comprising the steps of configuring said remote deployment module for collecting local network data, pre-validating such measurements and either comparing said measurements with corresponding planning data

of a network design sub-set or sending such measurements to a remote module for further processing.

41. (Currently Amended) A cellular communication network comprising at least one processing module for implementing the planning method of claim 22 ~~any one of claims 22 to 40~~.

42. (Currently Amended) A nontransitory computer readable medium encoded with a computer program product loadable into a memory of a computer and including software code portions for performing the steps of the method of claim 22 ~~any one of claims 22 to 40~~.